# PATENT COOPERATION TREATY

# **PCT**

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INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY
(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference 17720-19PCT	FOR FURTHER AC	TION	See Form PCT/IPEA/416			
International application No. PCT/CA2005/000309	International filing dat 25 February 2005 (2		Priority date (day/month/year) 26 February 2004 (26-02-2004)			
International Patent Classification (IPC) or national classification and IPC IPC: A63B 59/00 (2006.01), A63B 59/12 (2006.01), A63B 59/14 (2006.01), B29C 45/00 (2006.01), C08J 5/00 (2006.01)						
Applicant SPORT MASKA INC. ET AL						
This report is the international prelimi under Article 35 and transmitted to the	nary examination report e applicant according to	, established by this International Article 36.	ational Preliminary Examining Authority			
2. This REPORT consists of a total of	5 sheets, includi	ng this cover sheet.				
3. This report is also accompanied by Al	NNEXES, comprising:					
a. [ ] (sent to the applicant and		reau) a total of	sheets, as follows:			
[ ] sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).						
[ ] sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. 1 and the Supplemental Box.						
b. [ ] (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)) , containing a sequence listing and/or tables related thereto, in electronic form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).						
4. This report contains indications relati	ng to the following items	s:				
[X] Box No. I Basis of the rep						
[ ] Box No. II Priority						
		ard to novelty, inventive ste	ep and industrial applicability			
[ ] Box No. IV Lack of unity o						
[X] Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability;						
	planations supporting su	ach statement				
[ ] Box No. VI Certain documents cited						
[ ]Box No. VII Certain defects in the international application [X]Box No. VIII Certain observations on the international application						
[X] Box No. VIII Certain observe	ations on the internations	аі аррисацоп				
Date of submission of the demand 22 December 2005 (22-	12-2005)	Date of completion of the 14 July 2006 (14-07-200				
Name and mailing address of the IPEA/Canadian Intellectual Property Office		Authorized officer				
Place du Portage I, C114 - 1st Floor, Bo 50 Victoria Street Gatineau, Quebec K1A 0C9 Faccimile No: 001(819)953-2476	x PCT	Blair K	Cendall (819) 953-4017			

International application No. PCT/CA2005/000309

B	ЭХ	No.	<u>. I</u>	Basis of the report				
1.		Wi	th r	regard to the language	, this report is based on:			
	[X] the international application in the language			he international applic	ation in the language in which it was filed			
	Γ	[ ]		a translation of the international application into , which is the language				
				ranslation furnished for	, is the language of a			
			[	] international sear	rch (Rules 12.3(a) and 23.1(b))			
			[	] publication of the	e international application (Rule 12.4(a))			
			1		liminary examination (Rules 55.2(a) and/or 55.3(a))			
2.		ann	ıexe	ed to this report):	of the international application, this report is based on (replacement sheets which have been furnished to nse to an invitation under Article 14 are referred to in this report as "originally filed" and are not ation as originally filed/furnished			
	[	]		he description:	and the originally state attraction			
			[	] pages	as originally filed/furnished			
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			E	] pages*	received by this Authority on			
	[	]	th	ne claims:				
			Į.	] pages	as originally filed/furnished			
			Į	] pages*	as amended (together with any statement) under Article 19			
			[	] pages*	received by this Authority on			
			E	] pages*	received by this Authority on			
	[	J	th	ne drawings:	•			
			[	] pages	as originally filed/furnished			
			[	] pages*	received by this Authority on			
			[	] pages*	received by this Authority on			
	[	]	a s	sequence listing and/or	r any related table(s) - see Supplemental Box Relating to Sequence Listing.			
3.	ſ	1	Tŀ	he amendments have re	esulted in the cancellation of:			
-		J	Γ	] the description, pa				
			Г	] the claims, Nos.	-5CS			
			Ĺ	the drawings, shee	ets/five			
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1.	[	J	Th sin [ [ [ [	the description, pay the claims, Nos. the drawings, sheet the sequence listing	sts/figs			
ŧ,	If i	iten	14 (	applies, some or all of	those sheets may be marked "superseded."			

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Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial
	applicability; citations and explanations supporting such statement

1.	Statement						
	Novelty (N)	Claims	1-44 and 50-53	YES			
		Claims	45, 46, 47, 48 and 49	NO			
	Inventive step (IS)	Claims	none	YES			
		Claims	1-53	NO			
	Industrial applicability (IA)	Claims	1-53	YES			
		Claims	none	NO			

#### 2. Citations and explanations (Rule 70.7)

#### Reference is made to the following documents:

D1: US6500079 (Tucker, Sr.) December 31, 2002 (31-12-2002)

D2: CA2310802 (Quddus) February 04, 2001 (04-02-2001)

D3: US5577725 (Pagotto et al.) November 26, 1996 (26-11-1996)

D4: CA2118887 (Green et al.) September 08, 1995 (08-09-1995)

D5: CA1099761 (Burns) April 21, 1981 (21-04-1981)

## NOVELTY/PCT Article 33(2):

Claims 45, 46 and 47 are known in the art as they were disclosed in D4 before the claim date.

As best shown in figure 2 of D4, D4 discloses a hockey stick blade that has a polyurethane foam pad fitted onto a cutout in the blade. This cutout creates grooves as claimed in claims 45, 46 and 47. For this reason the blade claimed in claims 45, 46 and 47 is anticipated under PCT Article 33(2).

Claims 48 and 49 are known in the art as they were disclosed in D5 before the claim date.

As best shown in figures 2 and 4 of D5, D5 discloses a hockey stick with a urethane filler that covers the top and bottom edge of the stick blade as well as the stick shaft. For this reason the blade claimed in claims 48 and 49 is anticipated under PCT Article 33(2).

# **INVENTIVE STEP/PCT Article 33(3):**

D1 discloses a sports equipment handle with a soft, pliable, deformable overlay added at various locations on the shaft. Figure 6b shows overlays added to a lacrosse stick shaft using an interference fit, where the overlay fits into a dovetail slot cut lengthwise down the stick shaft. D1 further discloses that this interference fit can be used on any sports equipment handle. The overlays can be formed from materials such as thermoplastic urethane, Alcryn™ and Pebax™. Materials such as Alcryn™ rubber are chosen for their durability and grip friction as well as providing cushioning.

D1 further discloses in column 14, lines 31-48 of US6500079 that instead of using an interference fit, the overlays can be molded into cavities formed in the stick shaft.

In lines 48-58 of column 12 D1 further dislcoses that these overlay areas can be place in "preferred areas" on the stick shaft, which vary according to the sport. Shape and placement of the overlays will vary according to the grip and forces applied to that sports grip.

(see Supplemental Box)

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# Box No. VIII Certain observations on the international application

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

Under PCT Article 6, the claims must be clear, concise and fully support the description. Claims 1 and 50 lack clarity because it is unclear which element the "margin" being claimed is. No "margin" is disclosed by the application in the pending application.

Under PCT Article 6, the claims must be clear, concise and fully support the description. Claims 7, 8 and 30 lack clarity because it is unclear if the "cavity" claimed in claims 7 and 30 and the "groove" claimed in claim 8 are the same elements as the cavity and the groove claimed in previous claims. If these elements are in fact different elements then they should be differentiated by using different terminology than previously claimed to avoid ambiguity. If these elements are the same elements then they should be referred to using a proper antecedent.

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## **Supplemental Box**

In case the space in any of the preceding boxes is not sufficient.

Continuation of:

Box V

D1 further discloses in lines 15-17 of column 12 that the overlays can contain contoured indentations to accomodate the grip of a player's hand.

D2 discloses a double pressed hockey stick shaft and a method of manufacture. In figures 17, 18, 19 and 20 of D2, the stick shaft has edge grooves cut into each of the four corners of the stick shaft. As best shown in figure 20, these grooves are filled with fibreglass roving reinforcements and then pressed into the corners of the stick shaft.

D2 also discloses on page 26, lines 8-12 the use of an impact-resistant material such as Kevlar™ or Vextran™ to replace the fibreglass rovings.

D1 teaches that overlay material can be embedded and molded into a sports shaft at preferred locations on the shaft. D1 fails to disclose that the overlay material is to be placed into the corners of a recatngular-shaped stick shaft such as a hockey stick. However D2 discloses the use of impact-resistant material molded into the corners of a hockey stick shaft. One skilled in the art would be pointed in this direction.

For these reasons claims 1-15, 22-37 and 44, as well as method claims 50, 51, 52 and 53, each lack an inventive step under PCT Article 33(3), in view of D1 and D2.

D3 discloses a hockey stick handle with a forward and a rear gripping zone. As best shown in figure 6a of D3, the stick shaft is indented on one side and protruded on the other. The indentations and protrusions switch sides approximately half-way down the shaft, accommodating opposite hands of the user.

These indents and protrusions are equivalent to the depressions and raised portions claimed in claims 16, 17, 18, 19, 20 and 21 as well as claims 38, 39, 40, 41, 42 and 43. Adding depressions and raised portions to a sports shaft as claimed is known to those skilled in the art as it is taught in D3.

The sports shaft claimed in claims 16-21 and 38-43 is considered to be an aggregation of known elements that do not contain an inventive step under PCT Article 33(3), in view of D3 and D1 or D2.

#### INDUSTRIAL APPLICABILITY/PCT Article 33(4):

The sports shaft and hockey blade claimed in claims 1-53 comply with PCT Article 33(4), as they are considered to be industrially applicable.